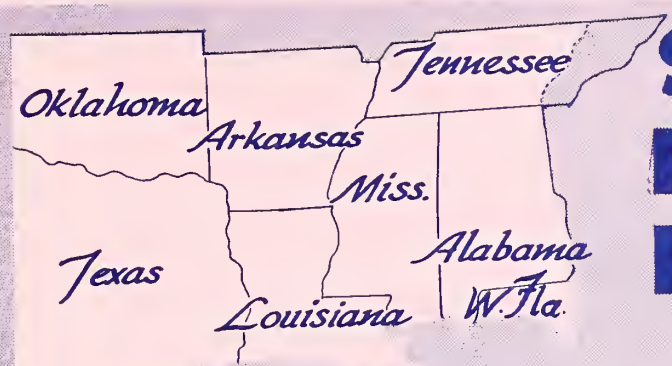

SOUTHERN FOREST PEST REPORTER

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There is no evidence of current southern pine beetle activity in Arkansas, Oklahoma, and Louisiana. For the first time in several years the beetle has been found in Texas, but only in two isolated cases.

In former epidemic areas in Mississippi and Alabama, infestations have been reduced to single or small groups of trees. Control measures are being continued in the form of mop-up work, but if dry conditions continue, more trouble may be expected. Because of the unpredictable nature of the southern pine beetle, its rapidity of reproduction, and the unusually dry conditions that have prevailed for so long, it is extremely difficult to foretell the course of the infestation during the coming months.

Ips bark beetle activity is at present confined to scattered weakened and dying trees.

Black turpentine beetles have been very destructive following selective logging operations, and control measures are being taken in several epidemic areas. During February, severe winds blew down 3-1/2 million board feet of timber on the Bankhead National Forest, Alabama. About 300,000 board feet are still on the ground, but salvage work is progressing rapidly. An increase of the beetle in stumps and the butts of broken trees is anticipated.

THE SOUTHERN PINE BEETLE

During the winter months the southern pine beetle infestations in Mississippi and Alabama became restricted to single or very small groups of overwintering brood trees. Below-freezing temperatures had arrested the beetles in different stages of attack, so that some trees harbored only a few individuals while others contained larger populations. The foliage in many instances remained green, making detection impossible from the air and difficult from the ground. During warm periods in December and January, some trees turned red; others faded gradually and became conspicuous in the late winter and spring.

Ranger district personnel detected dead and dying trees on the national forests by periodic flights and ground spotting. During each flight additional scattered red tops were found. In a few cases fresh attacks involving groups of 25 to 30 green trees in the vicinity of red tops occurred in late May, and rapid control measures were undertaken.

On the Oakmulgee District of the Talladega National Forest, the situation has been complicated by the lack of control measures on intermingling private lands. Progress is being made in interesting timber owners in contributing their share to the over-all control program.

The southern pine beetle has recently been reported from Lee County, east-central Alabama. Students in forest entomology from Alabama Polytechnic Institute have searched the woods each year and this is the first time the insects have been found. Only one infested tree has thus far been located.

For the first time in several years the southern pine beetle has been reported from east Texas. On two separate occasions routine inspections of salvaged logs along skidways in Hardin County revealed active broods, mixed with those of Ips engraver beetles.

IPS ENGRAVER BEETLES

Ips bark beetles are comparatively inactive and more or less confined to scattered weak and dying trees. Should dry weather continue, increased Ips activity may be expected.

BLACK TURPENTINE BEETLE

The black turpentine beetle has become increasingly troublesome during the past few months in many parts of the South. As noted in the December 1955 issue of the REPORTER, it is usually most severe in large pines growing on low, poorly drained soils, especially after such areas have been logged with heavy equipment. Drought over the past years has undoubtedly weakened the larger trees on these normally wet sites.

On the Sam Houston and Davy Crockett National Forests in Texas, the Kisatchie National Forest in Louisiana, and the DeSoto National Forest in Mississippi, beetle populations increased during early spring and spread to nearby standing timber. Persistent control efforts were necessary. Severely infested trees are being salvaged and the stumps sprayed with BHC. The butts of lightly infested trees are also being sprayed, to prevent further attack and population build-up.

Logging on private holdings near Alexandria, Louisiana, and Crossett, Arkansas, was followed by very active brood development in fresh stumps and skinned trees. The worst infestations occurred near roads where heavy equipment had converged in skidding out the logs. In several cases where tractors had been used during wet periods, the soil had been deeply rutted and the roots crushed and exposed. Infested stumps and damaged trees in these areas are being sprayed with BHC to prevent further increases in population.

Army tanks on maneuvers from Camp Polk, Louisiana, caused soil compaction and root injury on areas of the Kisatchie National Forest. Beetles have attacked many of the trees and further development is being watched.

PINE TIP MOTHS

Stunting of growth and distortion of branches by the Nantucket pine tip moth (Rhyacionia frustrana) is common in young plantations generally. This spring heavy attacks have been reported in one- and two-year-old loblolly plantations in Texas and in older plantations near Bogalusa, Louisiana. Activity of this insect will increase as the season progresses. Several overlapping generations will occur before late fall.

An experimental plantation of 4-year-old loblolly pine in Lavaca County, Texas, suffered severe damage by another species of tip moth, tentatively identified as Rhyacionia rigidana. From a distance the

young pines looked as if they had been scorched by fire. The moths of this species are noticeably larger than the Nantucket pine tip moth, having a wing spread of almost 3/4 inch. They are also more striking in color, the silvery-white forewings bearing crossbands of brick-red scales. Rigidana is said to be capable of severely injuring pines of large size.

PINE SAWFLIES

The loblolly pine sawfly (Neodiprion taedae linearis) caused varying degrees of defoliation to sapling and commercial-size loblolly in several counties in southern Arkansas and in La Salle Parish, Louisiana. Near Fordyce, Arkansas, 230 acres of severely defoliated pines were sprayed with DDT in an attempt to reduce growth loss and prevent spread to adjacent ownerships. The spray was applied by a Stearman biplane, flying 50 feet above the trees at 100-foot intervals. The cost was $2.50 per acre. Early indications are that control was effective.

Defoliation of plantation pines by the red-headed pine sawfly (Neodiprion lecontei) was observed in several counties in east Texas.

WHITE GRUBS

About 25 percent of a plantation of spruce pine seedlings on one acre of sodland at the Alexandria Research Center, in central Louisiana, was destroyed by white grubs, mostly Phyllophaga tristis apicata. The seedlings were approximately one foot high.

White grubs feed on the roots of nursery and plantation seedlings and are probably more widely destructive than is generally realized. Much of the seedling mortality blamed on drought and poor planting may be caused by these insects.

Adults of several species of Phyllophaga, commonly known as May beetles, were abundant around lights at night during April and May throughout the South.

MISCELLANEOUS PINE INSECTS

A pine needle miner, probably Recurvaria sp., has caused conspicuous browning of needles of mature longleaf pine in the vicinity

of the Kisatchie National Forest, Louisiana, and in southeast Texas. It is not known to kill pines, but undoubtedly weakens them and causes growth loss.

A pine pitch midge, Retinodiplosis sp., was generally plentiful in plantations throughout Texas and Louisiana. The insect causes resinous globules, sometimes 1 to 2 inches in diameter, to form on the branches and main stem of seedlings and larger pines. Orange-colored maggots about 1/8-inch long occur within the globules. The insect is considered to be of minor importance, although killed twigs may be conspicuous on the infested trees.

HARDWOOD INSECTS

Infestations of the European elm bark beetle on the Platt National Park, Oklahoma, are very much reduced as compared to last fall. An excellent control job has been done. Pruning of dying branches and removal of infested trees eliminated most of the beetles. The pruned trees now have healthy foliage and show little evidence of further die-back. Maintenance control will be continued as long as the drought prevails.

Larvae of the cottonwood leaf beetle (Chrysomela scripta) severely defoliated cottonwood nursery stock and young trees in Washington County, Mississippi, in late April.

DISEASES

Needle Blight (Hypoderma lethale)

During recent months, browning of foliage from the lower branches upwards has occurred on scattered large pines in Alabama, Mississippi, and Louisiana. Although many needles die and large portions of the crown become rust-brown, the trees are not killed by the disease. No practical control measures are known, under forest conditions.

Needle Rust (Coleosporium sp.)

Heavy infections of needle rust on young pines of all species have been reported from several localities in Texas and Mississippi. The orange-yellow fruiting bodies on the needles became conspicuous

in plantations during March and April. The disease has an alternate stage on composites (aster, goldenrod, etc.) and spreads from these to pines. It occurs in varying amounts each year on native southern pines. The past spring seems to have been particularly favorable for widespread development. No appreciable loss has ever been reported from this disease and no control measures are recommended at present.

ARKANSAS FOREST PEST ACTION COMMITTEE

Foresters in Arkansas met in February to organize a more comprehensive forest pest detection and control program. The Arkansas Forest Pest Action Committee was created, the members to be appointed by the State Forester. The Committee and all interested foresters will meet at least annually to plan forest pest detection and aerial surveys and to train foresters in the identification and control of insects and diseases. Guidelines for combating outbreaks of forest pests were presented at the meeting, and accepted.

For the past few years, over a hundred foresters (private, State, and Federal) throughout Arkansas have fully cooperated in reporting local forest insect and disease activity, and have stressed local control measures. A monthly summary of forest pest conditions in Arkansas based on these reports has been circulated to interested readers. The efforts of this progressive group have made it possible to analyze the forest pest situation, provide timely warnings regarding current pest problems, and control outbreaks in their incipiency.

TEXAS FOREST PEST COMMITTEE

The Texas Forest Pest Committee met in April and made plans for an aerial pest detection survey over the forests of east Texas in July. The project will be a cooperative one shared by industry, the Texas Forest Service, and the U. S. Forest Service. The same basic flight plan will be used annually or more often should conditions warrant. The intensity of the survey will depend upon the degree of insect hazard, which is based largely on the history of past epidemics and the inaccessibility of the stands. This is the first detailed, cooperative aerial pest detection survey developed in the Deep South. It will do much to organize the east Texas area in detecting serious insect threats, present or future.

TRAINING SESSIONS

Approximately 200 foresters and timber owners were trained in the identification and control of forest insects and diseases at meetings held throughout Arkansas in early May. Interest shown at these meetings has been very gratifying.

Similar training sessions are planned for east Texas in June, and Louisiana in July.

SOUTHERN FOREST INSECT WORK CONFERENCE ORGANIZED

The first annual meeting of the Southern Forest Insect Work Conference will be held on September 11 and 12, 1956, at the School of Forestry, University of Georgia, Athens, Georgia. This will be an informal meeting at which those in attendance can exchange information and ideas regarding research, surveys, and control. Further details will be given in a later issue of the REPORTER. Mark these dates on your calendar and plan to attend.